## REMARKS

Claims 1-17 are pending in the application. Claims 1, 5, 9, and 13 are independent claims. Claims have been rejected under 35 U.S.C. 102(e) and under 35 U.S.C. 103(a). Those rejections are respectfully traversed and reconsideration is requested.

Rejections under 35 U.S.C. 102(e)

Claims 1, 3-5, 7-9, and 11-17 have been rejected under 35 U.S.C. 102(e) as being anticipated by Tzeng (U.S. Patent No. 6,067,574).

Before discussing the cited references, however, a brief review of the Applicant's disclosure may be helpful without limiting the claims. The Applicant's disclosure is directed to a method and apparatus for updating a lookup table. Referring to Fig. 23, access is provided to a first set of routes (r6, h1) that are stored in the nodes of a first subtree ($B_2$ 2006) that is part of a larger tree. A second set of routes (r6, h1, h2) is stored in the nodes of a second subtree ($B_2$' 2008), which is stored separate from the larger tree. Both subtrees are accessed through pointers to their respective root nodes. During updates to the second set of routes (r6, h1, h2), in this case the addition of h2, the first set of routes (r6, h1) remains accessible to the lookup table via the first pointer. In order for the lookup table to gain access to the updated routes (r6, h1, h2) of the second subtree ($B_2$' 2008), the tree's access is switched from the first set of routes to the second set of routes by replacing the first pointer with the second pointer and, therefore, replacing the first subtree with the second subtree. (*See* Applicant's Specification, page 43, line 12 – page 45, line 6; and Fig. 23).

Turning to the cited reference, Tzeng discusses a traditional prefix tree structure that may be partitioned into multiple trees in such a way as to allow compression. Tzeng does not teach or suggest *"storing a second set of routes in nodes of a second subtree separate from the tree, the second subtree being accessed through a second pointer to a second subtree root node, while access is provided to the first set of routes stored in the first subtree by the first pointer"* as now claimed in independent Claim 1. While Tzeng discloses the use of a tree with a left child (first subtree) and a right child (second subtree) (*see* Tzeng, col. 2, lines 18-45), Tzeng does not teach

or suggest that the first subtree is stored as part of a larger tree while the second subtree is stored separate from that tree.

Therefore, Tzeng does not teach or suggest *"storing a second set of routes in nodes of a second subtree separate from the tree, the second subtree being accessed through a second pointer to a second subtree root node, while access is provided to the first set of routes stored in the first subtree by the first pointer"* as now claimed in independent Claim 1.

Furthermore, Tzeng does not teach or suggest *"switching access to the second set of routes stored in the second subtree by replacing the first pointer to the first subtree root node with the second pointer to the second subtree root node to update the tree by replacing the first subtree with the second subtree"* as now claimed in independent Claim 1. Referring to Fig. 23 of the present application, the lookup table maintains access to the routes of the first subtree ($B_2$ 2006) while the routes of the second subtree ($B_2'$ 2008) are being updated. In order for the lookup table to gain access to the updated routes of the second subtree, the first pointer pointing to the first substree is replaced with the second pointer pointing to the second subtree. This updates the larger tree by replacing the first subtree with the second subtree. Even if the left and right child nodes of Tzeng were construed in such a way as to correspond to the first and second subtrees of the present application, Tzeng does not switch access from the left child node to the right child node, as both the left and right child nodes are always accessible.

Therefore, Tzeng does not teach or suggest *"switching access to the second set of routes stored in the second subtree by replacing the first pointer to the first subtree root node with the second pointer to the second subtree root node to update the tree by replacing the first subtree with the second subtree"* as now claimed in independent Claim 1.

For the reasons stated above, independent Claim 1 should be found in allowable condition. Independent Claims 5, 9, and 13 are similar to Claim 1 and should be found in allowable condition for the same reasons as stated above for Claim 1.

Dependent Claims 3-4, 7-8, 11-12, and 14-17 are directly or indirectly dependent on Claims 1, 5, 9, and 13 and thus are novel over the cited art for at least the same reasons as stated above for independent Claims 1, 5, 9, and 13.

As such, the 35 U.S.C. 102(e) rejections of Claims 1, 3-5, 7-9, and 11-17 are believed to be overcome, and withdrawal of this rejection is respectfully requested.

Rejections under 35 U.S.C. 103(a)

Claims 2, 6, and 10 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Tzeng in view of Nakatsu (US Patent No. 5, 787151).

Dependent Claims 2, 6, and 10 are directly or indirectly dependent on Claims 1, 5, and 9 and thus are novel over the cited art for at least the same reasons as stated above for independent Claims 1, 5, and 9.

Therefore, separately or in combination, Tzeng and Nakatsu do not teach or suggest the Applicant's claimed invention. Thus, none of the cited art alone or in combination makes obvious the Applicant's claimed method or apparatus for updating a lookup table.

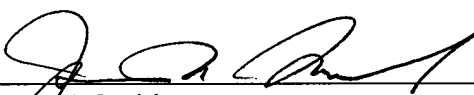As such, the 35 U.S.C. 103(a) rejections of Claims 2, 6, and 10 are believed to be overcome.

Accordingly, the present invention as claimed is not believed to be anticipated or made obvious from the cited or prior art. Removal of the rejections under 35 U.S.C. 102(e) and the rejections under 35 U.S.C. 103(a) and acceptance of Claims 1-17 is respectfully requested.

## CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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